



THE RARA RAG

Newsletter of The Rochester Amateur Radio Association, Inc.

Founded in 1931

AUGUST MEETING: A YEAR IN ASTRONOMY

TIM BARRETT, K9VB, RARA VICE PRESIDENT

David Bishop returns to RARA for a presentation on astronomy news and events at our August meeting. He will be reviewing significant events from the last year with plenty of high-resolution pictures and perhaps some video.

David is an FPGA designer at L3Harris and is the Vice President of ASRAS, the Astronomy Section of the Rochester Academy of Science.

David has presented several times at RARA, and his presentations have always been very interesting and well received. Every year remarkable things happen in Astronomy and Space activities that the national news does not cover, but David finds them.

Please join us on August 7th 2024, 7:00PM at the Boy Scouts Headquarters at 2320 Brighton Henrietta Townline Road, Rochester, New York 14623 or online by registering at:

<https://endee.gotowebinar.com/register/3597364992181865557>



AUGUST 2024
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RARA



K2JD

N2EH

W2EOC

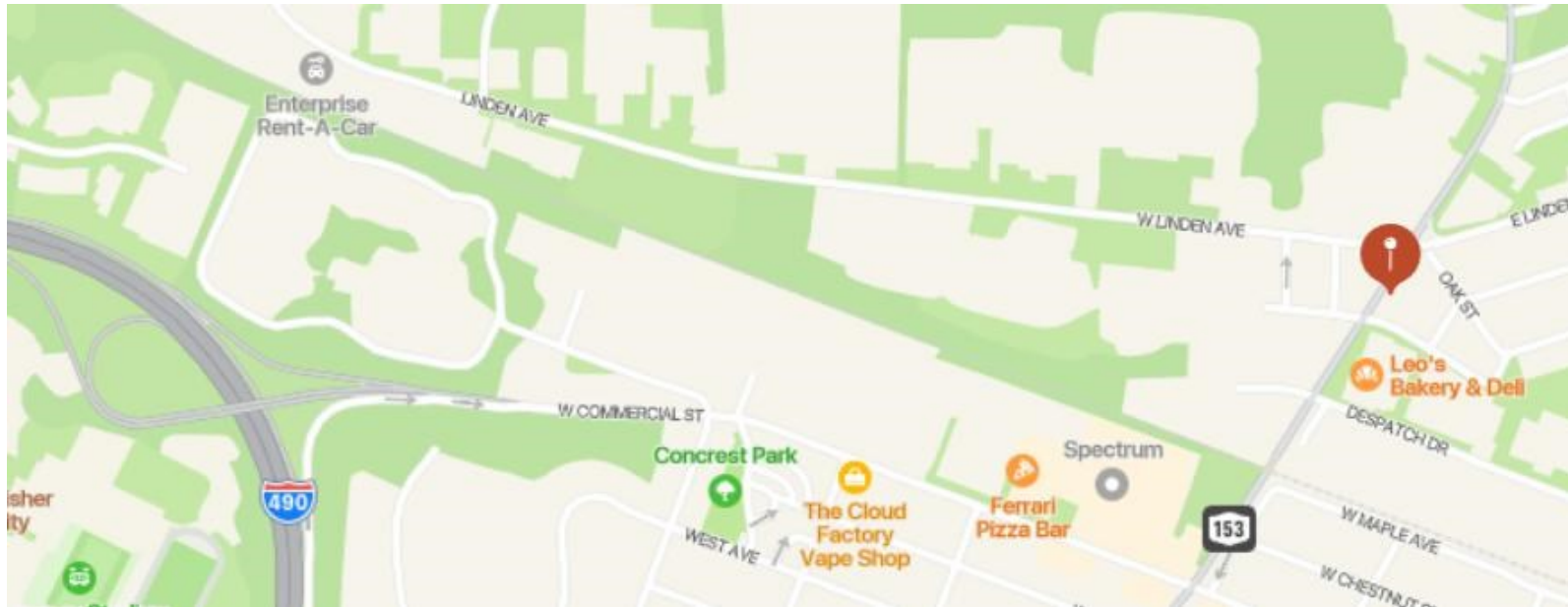
2024 RARA BANQUET

MIKE MOORE, KC2NM

Save the Date — Sep 20, 2024 6:00 PM

The 2024 RaRa Banquet will be held at Perlo's Restaurant in East Rochester,
202 N. Washington St., East Rochester, NY 14445

<https://www.rochesterham.org/banquet.htm>



RARA MEMBERSHIP NEWS

TIM BARRETT, K9VB, RARA VICE PRESIDENT AND MEMBERSHIP SECRETARY

Membership of RARA now stands at 461, that's a healthy membership but we are still behind the 565 members we had at this time last year, so if your membership has lapsed please consider renewing and help us build back our membership count.

Any renewals or new member applications made now go through until September 2025 so that is 14 months for the price of 12, a good deal! Also please remember that memberships lapse at the end of September and it really helps if members renew before the lapse date.

If your membership has lapsed, please renew your membership!

You can join by clicking [here](#) or renew your membership [here](#).

There are many membership benefits, here are just some of them:

- Only members can attend the RARA Annual Auction
- Free admission to the RARA Hamfest
- Access to license classes and discounts for license manuals
- Annual events such as the Picnic and Winterfest
- Earn Membership Points for contributing/volunteering at Club Events.
- Redeem Membership Points for annual dues and other activities
- Supporting an Organization that you value!

Being a member is also important, as your dues and a healthy membership count contribute to many RARA activities such as Rag subscription, monthly meetings, RARA Academy sessions Elmer's Corner, [groups.io](#) mailing list, Facebook page, etc. Attracting good speakers is greatly helped when we can point to the size of our club, one of the largest ARRL affiliated clubs by the way.



I'd like to give a warm welcome to our new members:

- Donna Lee Jestel
- Roger Jestel
- Danielle Williams, KE2CCA

Remember to look out for new members at RARA events and make sure to introduce yourself and welcome them to the club!

Get Your RARA Merch at Cafepress®



Tees, Hooded Sweatshirts, Caps and More!

www.cafepress.com/rararadio

UPCOMING EVENTS

BRIAN O'CONNOR, KA2CGB, TREASURER

This summer will include many opportunities for you to be out and about with RARA:

August 10: The MS ROC Great Lakes Adventure benefits the Multiple Sclerosis Society. This fundraising event will begin and end at Lakeside Beach State Park extending west toward Olcott. Orleans County OCARC will be leading this activity.

August 10: We have been asked to provide operational and safety communications for the Mammoth March, which is a rigorous 20-mile, 8-hour hike around Letchworth Park. Because of the topography, we may need to be creative with multiple repeaters, cross band and maybe even 6 meters or HF. We plan supporting HQ (start/finish) along with four (4) on-trail aid/water stations as well as mobile support by sweep and shuttle crews.

August 17-18: Join us at the Charlotte-Genesee Lighthouse for the International Lighthouse Lightship Weekend (ILLW). This should be a great year to make HF QSOs with individual Hams as well as other ILLW stations. See <https://www.rochesterham.org/ILLW%20weekend.htm> for the latest information.

See https://www.rochesterham.org/public_service.htm for up to date information on public service events

Hamfests in Western New York

August 17: KLARA Hamfest, Hornell NY: <http://klara.us>

August 24: ROC City Net Hamfest in Macedon: <http://roccitynethamfest.com/>

Several more Hamfests will be held in September. For a current listing see <https://www.upstateham.com/p/2014-upstate-hamfests-that-i-have-heard.html>

CALENDAR OF EVENTS

Wednesday August 7, 2024 - RARA Meeting In Person and On-Line 7:00 PM

Saturday Aug 10, 2024 - MS Roc the Ride Great Lakes Adventure, Lakeside Beach State Park

Saturday Aug 10, 2024 - Mammoth March Upstate NY, Letchworth Park

Saturday & Sunday Aug 17, 18, 2024 - ILLW, Charlotte-Genesee Lighthouse, Charlotte

Sunday Sept 22, 2024 - Wilmot Breakaway Ride, Xerox Campus, Webster



EDUCATION

Karl Heinz Kremer, K5KHK, Education Coordinator

RARA LICENSE COURSES

License Classes

It is summer, which means that our classes are taking a break. If you missed our last round of classes, please let us know that you are interested, and we will put you on the list for the next session. Just like our license classes, our VE testing sessions are also taking a break until September. Keep in mind that there are other testing opportunities in the area: Spring and summer is the season of hamfests, and a lot of hamfests do offer VE testing.

New General Question Pool

Since July 1st, 2023 all General license exams are now using the new question pool, which means that you need the 10th edition of the ARRL License Manual to study for the test. Make sure you have the correct edition. Even though this book is almost brand new, it already is out of date – the FCC changed the data rate limitations on the HF bands to a bandwidth restriction. In general, you can find the questions in all three question pools that have been withdrawn listed on this page: <http://www.arrl.org/withdrawn-questions>.

New Amateur Extra Question Pool

Since July 1st 2024, all Amateur Extra license exams are now using the new question pool, which means that you need the 13th edition of the ARRL License Manual to study for the test. Make sure you have the correct edition. We have the new Amateur Extra License Manual available.

License Manuals

The current editions of the license manuals are available to our members at a discount for \$25. At this discount, we unfortunately can not deliver, and you would have to pick up the manual. If you are interested, please send an email to

education@rochesterham.org

I usually have some license manuals with me at official RARA events (e.g. the monthly meetings).

RARA ACADEMY

There are a few things that are being considered for the Fall/Winter season: I still owe you the second session about LTSpice, then I am planning a session about bandpass filters that might involve actually building such a filter, and we are talking about an hand-on introduction to operating on HF.

If you have anything you would like to teach in a RARA Academy, please let us know. Even if it's something shorter, we can combine your topic with something else to fill the two-hour time slot that we usually aim for.

We are still looking for input in what our next Academy session should cover. To make it easy for our members to provide such input, we created an online survey. Please go to [RARA Survey](#) and fill out the survey form.

And we are again looking for a volunteer to organize our RARA Academy sessions. This is a position for which you don't have to be an expert in anything as long as you are **good at organizing things**, and you will get a front row seat for all Academy presentations. If you are interested in joining our education team, please let us know.

RARA ELMERS' CORNER

Suzanne Bishopp, W2SUZ
Rich Bishopp, KD2UBJ
Elmers' Corner Coordinators

1st Saturday of the month
September – May

Summer is here, and so is the camping season. Rich and I will be out in our teardrop a lot this summer, so we'll be taking a couple of months off from doing the Elmers' Corner meetings.

Remember, just because we won't be doing Zoom meetings in July and August, doesn't mean we can't help you. We will always be around to answer any questions you have.

Please email your questions to us at elmerscorner@rochesterham.org and we will find the right person to help you.

ELMERS' CORNER

Next Zoom Meetings:

September 7th 10AM –12PM

October 5th

Join Zoom Meeting

[https://us02web.zoom.us/j/83484674667?](https://us02web.zoom.us/j/83484674667?pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09)

[pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09](https://us02web.zoom.us/j/83484674667?pwd=MG5DZXd6SFovN3lXa0NNTzM5UnBLUT09)

Meeting ID: 834 8467 4667

Passcode:786545

One tap mobile

+16465588656,,83484674667#,,,,*786545# US (New York)

+13126266799,,83484674667#,,,,*786545# US (Chicago)

Dial by your location

+1 646 558 8656 US (New York)

+1 312 626 6799 US (Chicago)

+1 301 715 8592 US (Washington DC)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 669 900 9128 US (San Jose)

Find your local number: <https://us02web.zoom.us/j/kiOoVkCMY>

Suzanne – W2SUZ

Rich – KD2UBJ

MORSE CODE TRAINING

Dave Wilson, WA2HOY, RXCWG Coordinator

The RXCW Group assists Hams wanting to learn Morse Code or to develop their CW skills.

BEGINNERS MORSE CODE ZOOM CLASSES

LOOKING FOR A NEW BEGINNER'S MORSE CODE ELMER

To all CW Elmers, Pete Fournia, W2SKY, has stepped down as instructor for the Beginner's Morse Code Class. If you would like to take over this class and help folks get started in CW, please get in touch with me, Dave, WA2HOY, or Karl Heinz, K5KHK.

MORSE PRACTICE FOR ALL LEVELS ON ZOOM AND ON THE AIR

Tim Brown, WB2PAY, hosts Zoom code practice for all levels on Thursday evenings at 7:30pm. For On Air schedules contact Tim at:

tjbrown@rochester.rr.com

RXCWG INTERMEDIATE CW PRACTICE- 7:30pm Thursdays

Join Zoom Meeting

[https://us04web.zoom.us/j/79966212852?](https://us04web.zoom.us/j/79966212852?pwd=M0M1MlBmVTJkWWI0RjRLYXljc3pOUT09)

[pwd=M0M1MlBmVTJkWWI0RjRLYXljc3pOUT09](https://us04web.zoom.us/j/79966212852?pwd=M0M1MlBmVTJkWWI0RjRLYXljc3pOUT09)

Meeting ID: 799 6621 2852

Passcode: tpjz8e

W1AW On The Air CW Practice

<http://www.arrl.org/w1aw-operating-schedule>

Time	Mon	Tue	Wed	Thu	Fri
9 AM		Fast	Slow	Fast	Slow
4 PM	Fast	Slow	Fast	Slow	Fast
7 PM	Slow	Fast	Slow	Fast	Slow
10 PM	Fast	Slow	Fast	Slow	Fast

SLOW - 5, 7 1/2, 10, 13 and 15 wpm

FAST - 35, 30, 25, 20, 15, 13 and 10 wpm

FREQ(MHz) - 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 50.350, 147.555

RADIO ELMERS

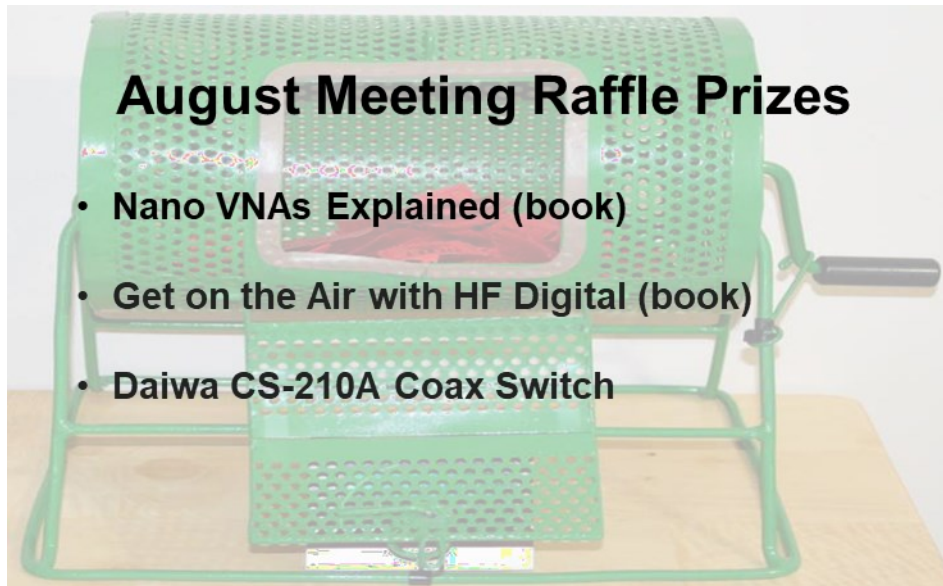
Name	Call	Area	Email
Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Dave Carlson	N2OA	Batavia	kdcarlso@gmail.com
Lawrence Hill	N2AJX	Henrietta	lawrence.hill@rit.edu
Rich Hoffarth	K2AXP		rhoffarth2000@yahoo.com
Bill Kasperkoski	WB2SXY	Pittsford	wb2sxy@gmail.com
Don Kiser	AC2EV	N Greece	dkiser100@gmail.com
Karl Heinz Kremer	K5KHK	Chili	k5khk@khk.net
Tim Magee	WB2KAO	Greece	585-704-5747
Mike Moore	KC2NM		mikemoore@ieee.org
Peter Schuch	WB2UAQ	Perinton	pschuch@rochester.rr.com
Forest Shick	WA2MZG	Webster	fshick3@gmail.com
Dave Timmons	W2DST	N Greece	dstimmons@gmail.com
Steve Verzulli	KA1CNF		verzulli@yahoo.com
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CW ELMERS

Name	Call	Area	Email
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Tim Brown	WB2PAY	Ogden	tjbrown@rochester.rr.com
Pete Fournia	W2SKY	Penfield	pfournia@gmail.com
Bill Hopkins	AA2YV	Brighton	whopkin4@naz.edu
Bob Karz	K2OID	Webster	rkarz@rochester.rr.com
Joe Rowe	AG2Y	Webster	ag2y@rochester.rr.com
Harry Williams	KF2TV	Kingsland, GA	harryw7872@gmail.com

August Meeting Raffle Prizes

- Nano VNAs Explained (book)
- Get on the Air with HF Digital (book)
- Daiwa CS-210A Coax Switch



A DIGITAL STATION IN YOUR POCKET

KARL HEINZ KREMMER, K5KHK

How small can a complete station to work FT4/8 be? With the **QRP-Labs QMX**, we have a transceiver that certainly fits the bill for a small station. By itself it can only be used for CW, to use the digital modes, one has to combine it with a computer. Even the smallest laptop is too big to fit into the pockets of my cargo pants – we are trying a pocket-sized station after all 😊 In this article, I will describe how to use a QMX transceiver and an iPhone to activate a POTA park with FT8.

The Components

My QMX is the original that was released at F2M 2023, so it covers 80m to 20m. Mine is serial number #20.

My iPhone is small enough, but unlike Android based phones, the QMX cannot be connected directly to the phone. Apple sells a “camera adapter”, which plugs into the phones Lightning port on one side and provides a USB connection on the other end. \$29 for the original Apple part was a bit hard to swallow, so I opted for something cheaper straight from Chinas’ “we clone everything” factories: <https://www.amazon.com/Lightning-Adapter-Charging-Connect-Keyboards/dp/B09YQF43Q9>



The picture shows both a USB and a lightning port on the adapter. This should allow the phone to be powered/charged while the adapter is being used – more about that later.

Another limitation is the antenna: The QMX does not have a built-in antenna tuner, and even my QRP sized ZM-2 would have to live in a different pocket 😊 My plan is to use a resonant antenna so that I would not need a tuner .

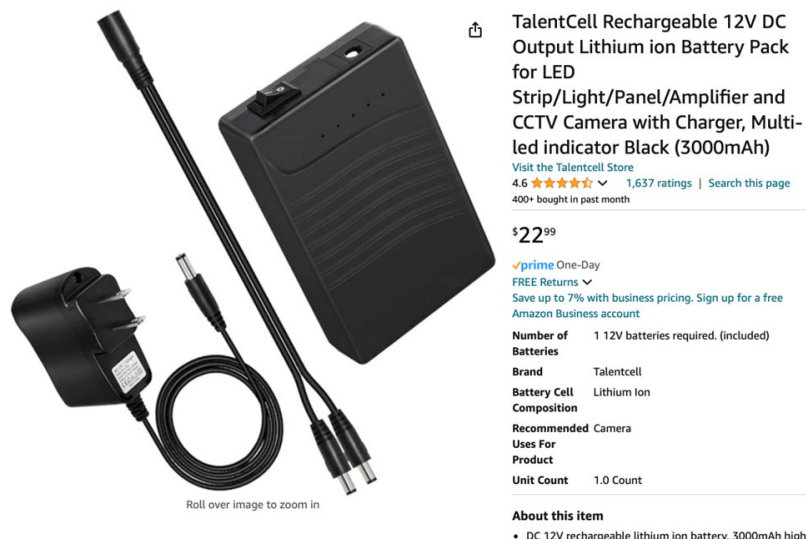


The easiest antenna with a good match is a dipole, but that is a bit more challenging to deploy in the field, so I opted for an end-fed halfwave (or EFHW) antenna with a 49:1 transformer. I 3D printed a winder that allowed a BNC connector and the transformer to be mounted on the wire winder:

The design came from Thingiverse: <https://www.thingiverse.com/thing:2871679> Because I am using a different toroid for the transformer, I had to remove the “bump” that is holding the toroid in place. Going forward, I may change the design a bit more to have so that I can fit more wire on the winder.

For those familiar with the transformers usually used for EFHW antennas, the picture shows two things that are different: As I’ve already mentioned, I am using a different toroid (the Fair-Rite 2661102002 core, which is a type 61), and a different winding pattern. More about that in a future post.

To power my station, I am using a TalentCell rechargeable 12V power bank: <https://www.amazon.com/TalentCell-Rechargeable-Amplifier-Multi-led-Indicator/dp/B00MHNQIR2>



First Test

With everything in place, I tried to make a quick FT8 contact from home with this setup, but with my “big” EFHW antenna in my backyard. Because it was just a quick test, I did not even bother to hook up the charging cable for my phone (more on that later).

The software I am using is iFTx (<https://iftx.ch/documentation.html>), which supports both FT4 and FT8.

I connected the phone to the adapter from above, connected the adapter via a USB cable to the QMX, and connected the QMX to a 12V power supply (unlike anywhere else in ham radio, 12V here means 12.0V and not the usual 13.8V), and hooked up the antenna to an antenna tuner and then to the EFHW in my back yard.

I answered an FT8 CQ call and successfully completed the FT8 exchange. The software does the automatic sequencing of the different messages, so it is very straight forward to use. With this first contact, I verified that the iPhone/adapter/QMX setup does work.

The Real Test

The next attempt was while camping at Hamlin Beach State Park (US-2068). I set up everything just like at home, but because I was planning on being on the air for a while. I also hooked up the cable to charge my phone while I was operating.

I was able to receive stations, but could not transmit. What made the troubleshooting more complex is that during setup, I created some sparks (that is why I do not like the barrel connector for power). I was pretty sure that the QMX was not involved, but not being able to transmit kind of suggested that I killed the finals. So I put everything away and used my KX2 instead.

Back home, I did some troubleshooting and hooked up a straight key to the QMX and it worked: I was able to finish a few CW QSOS without a problem, so the finals were definitely OK. I then set up the system again for FT8, and sure enough, I was able to make a contact. Because it was a quick test, I did not bother to use the power cable for the phone. By now, most of you probably know what the culprit was, but because I did not spell things out like this, I was still in the dark.

Success At Last

Fast forward a few more days... We went back to Hamlin Beach State Park – but this time to the picnic area – and I set up my station again. And sure enough, once everything was set up, the QMX did not transmit. This is when I took a step back and reviewed everything I had done so far, and slowly I came to the realization that when I provide power through the adapter to the phone, the QMX would not transmit.



I was able to finish my FT8 activation with my pocket-sized digital station. I did run into one problem however: iFTx allows to automatically determine one's grid square – which of course is important for FT8. When I enabled that, it correctly put me into FT13 at first, but a few QSOs later it switched me to JJ00aa – I reported this as a bug to the developer.

Using iFTx with the iPhone

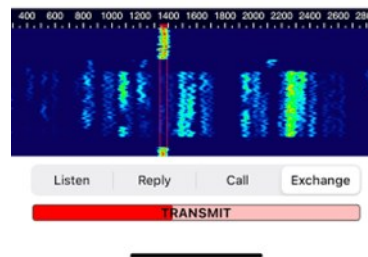
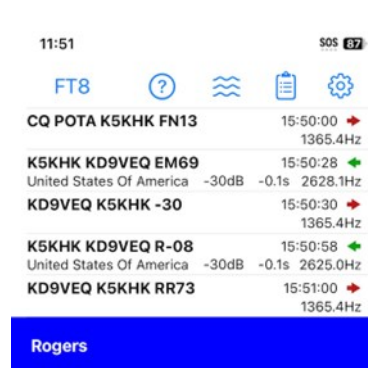
The connection from the phone to the QMX is audio only. iOS does not allow an application to open a serial port connection (unlike Android). This means that the QMX will not receive any frequency information from the phone, and also no PTT signal. For this setup to work, the operator must make sure that the QMX is tuned to the correct frequency that the correct band is selected in iFTx, and that the QMX is set to VOX mode (this is in the Digi Interface menu).



When configuring iFTx, it is possible to select a “Special Interest Activity” like POTA. This is then added to the CQ call as in “CQ POTA K5KHK FN13”.

As I’ve mentioned before, the application will automatically sequence the correct messages when a station answers the call.

Once the QSO is completed, it will be logged to the iFTx internal log, which can be exported via the usual “send to” methods available in iOS (e.g. email the log, save as a file, ...).



When exporting the log, there is a choice of exporting everything, or only the new QSOs since the last export. This will create an ADIF file, which can be submitted to the POTA program, or imported into any other logging program.

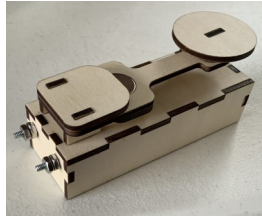
At the end, I was successful in building a “pocket sized” digital station based on the QMX, I just need a fully charged phone and cannot depend on charging it while operating.

ANATOMY OF A WOODEN KEY

FOREST SHICK, WA2MZG

As I mentioned in my previous article, in the July Rag, “Laser Engraver / Cutter”, here are the details for making a wooden straight key.

As I was writing this article and building the “final” version of the key, I have been making changes. And yet, I can find more changes. But it works!



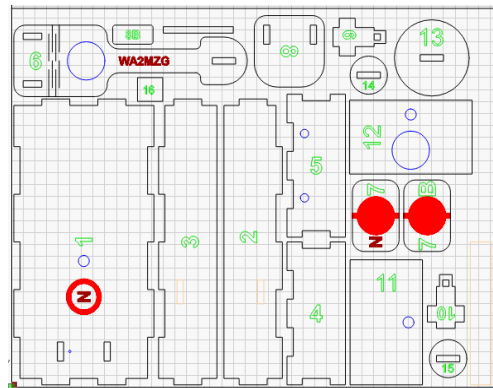
Model 2

The process involved drawing all the parts in 2D, unlike making a project for a 3D printer. This project is cut from a flat piece of wood.

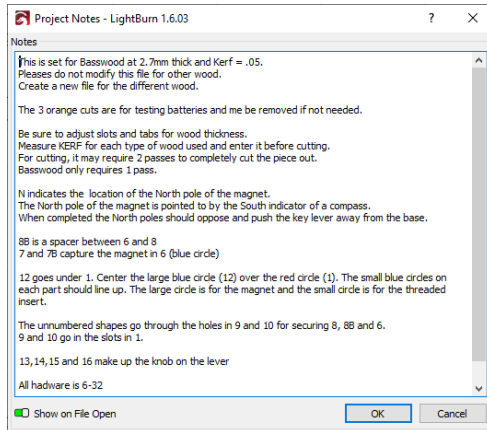
I numbered the pieces so I could easily make notes. The [Lightburn](#) software has a nice feature allowing the addition of project notes.

Components:

- 1, 2, 3, 4, 5 form the base.
- 6 is the key lever. The dashed lines are a “living hinge”, the lever flexes at that feature. The blue hole is the location of one magnet.
- 7 and 7B hold the magnet in the lever.
- 8 and 8B prevent the key lever from being pushed too far up by the magnets (the spring).
- 9, 10 mount to the base and support the key lever.
- 11, 12 locate inside the base to hold the second magnet.
- 13, 14, 15, 16 form the knob on the key.
- The unnumbered, small, rectangular piece passes through the hole in 9 and 10 to secure the key lever.



2D Drawing

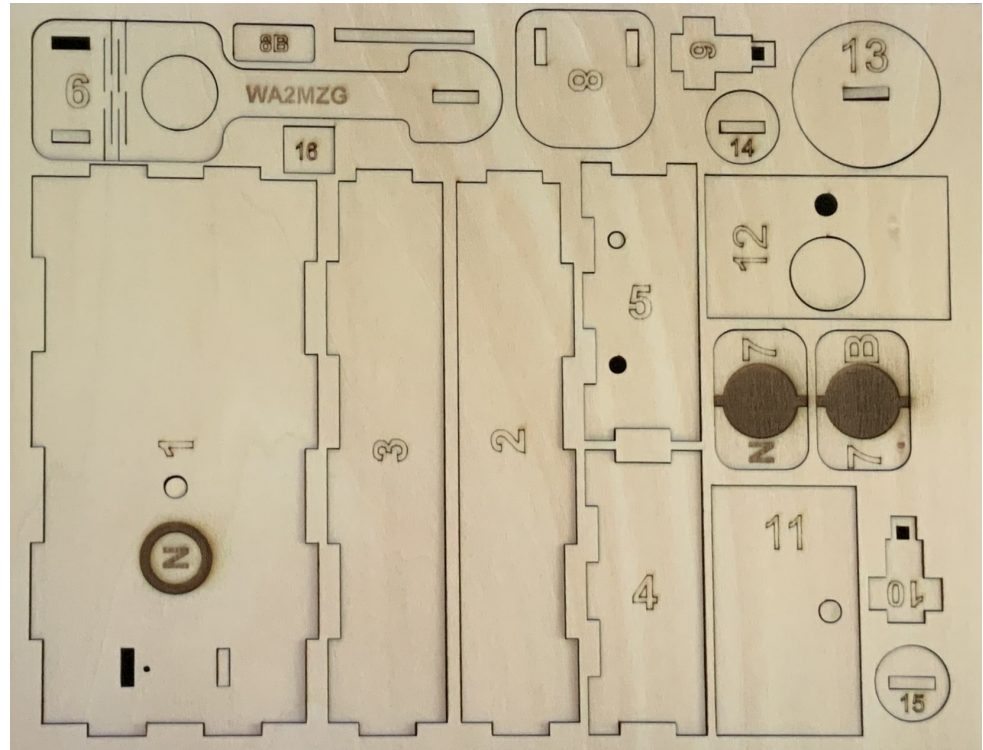


Project Notes

North Pole of the magnet should go in that direction. Just to be clear, the North Pole of the magnet is pointed to by the South indicator on a compass. NOTE: It could be the south poles as long as the magnets are opposing when installed. The magnetic opposition provides the spring for the key.

The red bar on piece 7 is a recessed path for a wire from the contact on the key lever. The recessed areas are actually burned to create a pocket for the magnets since some of the magnets I have used are thicker than the basswood.

After the drawing is complete, it is time to cut the pieces from a single sheet of basswood.



Components Have Been Cut

You may use other types of wood, but you will have to adjust your drawings due to thickness variations.

For example, the basswood sheets are 12 inches by 12 inches and 1/8 inch thick. The important dimension is the thickness because it determines the size of the slots and tabs used to construct the key. I designed this project in millimeters and the basswood is 2.7mm thick. Other types of wood, although marked as 1/8" (3.175mm), vary in actual thickness.

There is a bit of hardware required for this project. I used #6 hardware since it was available at Lowes.

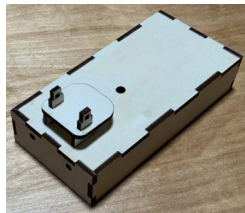
- Two 6-32 x 1/2 screws for the terminals
- Two 6-32 lock washers for the terminals
- Two #6 solder lugs from Digikey
- One 6-32 x 1 screw for the contact - be sure to file the end smooth
- Two #6 knurled nuts for the terminals
- Three #6 nuts for the terminals and contact
- One #6 threaded insert (brass) for wood
- A small PWB used as a contact from [QRPme](#). Unfortunately the little pads are no longer available
- Two neodymium magnets approximately 5/8" diameter and 1/10 to 1/8" thick. These can be found on Amazon or from [K&J Magnetics](#).
- Solid wire to connect the contacts to the terminals



Hardware and Magnets

I have tested 4 magnetics. Three from K&J at 6, 8 and 10LB strength. The one from Amazon is undetermined strength but less than 6 LB. All 4 seem to work.

I built the first few models using CA (cyanoacrylate) glue. This poses an alignment problem. If the pieces are not aligned properly before the glue sets - you have a problem! I decided to use wood glue for the "final version". The assembly process takes 2 days instead of 10 minutes but the result is better.



Base Components: 1, 2, 3, 4, 5, 9, 10, 12



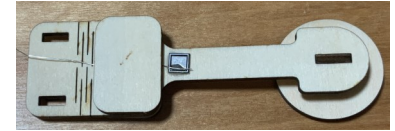
Terminal Hardware



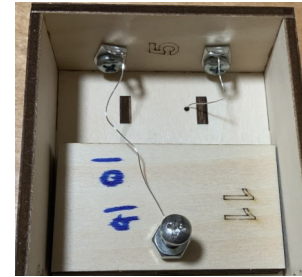
Knob Components: 13, 14, 15 and 16



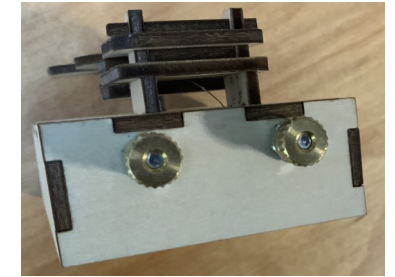
Lever with knob and 8B (spacer) Look carefully - see the wire for the contact in the magnet hole



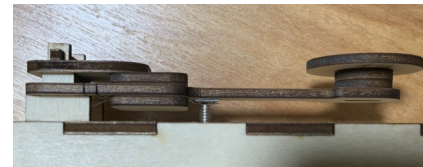
Lever with PWB contact and 7B



The center screw is the contact and height adjustment



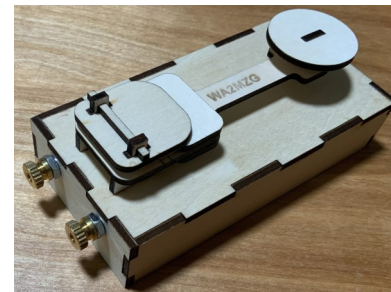
End View - Note the wire from the lever through the base



Side View



Wenge and White Oak Model 3



"Final" Model 5

NOTE 1: The lever assembly is not glued to standoffs: 9 & 10. The unnumbered rectangle of wood, locks the stack in place and allows key lever removal for redesign of just the lever assembly.

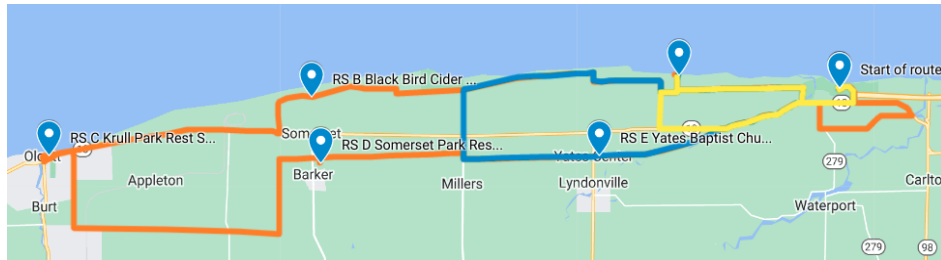
NOTE 2: After some testing, the lever should be made from a stiffer wood such as oak. The basswood lever flexes.

AUGUST 2024 PUBLIC SERVICE REPORT

MIKE MOORE, KC2NM, PUBLIC SERVICE COORDINATOR

MS ROC THE RIDE GREAT LAKES EXPERIENCE

RARA Amateur Radio Association is proud to partner with Orleans County ARC to support the MS ROC the Ride Great Lakes Experience on August 10th! This scenic bike ride, traversing Orleans and Niagara Counties, raises crucial funds for the fight against Multiple Sclerosis. Join us as we cycle for a cause and help change the world for those impacted by MS. See the [2024 Great Lakes Route Map](#) for ride details.



Communications will use the NR2C repeater on 442.025. Chuck, NR2C, owns this repeater located at his home in Medina. The command center will be set up in the picnic pavilion in the Lakeside State Park with communications support from a coalition of amateur groups. There are 3 routes (62.5 (orange), 25 (blue), and 18 (yellow) miles) that will be the same as last year's planned ride. The 62.5 mile ride will start at 8 AM, and the other two rides will start at 9 AM. We will provide Route Communications, Sag, and Sweep Roles. We are invited to lunch and the after-party following the ride.



The RARA Amateur Radio Club is excited to announce we will be providing critical communication support for a challenging 20-mile, 8-hour hike through Letchworth Park on August 10. Due to the park's diverse topography, we may need to employ a multi-faceted approach using multiple repeaters, cross-band communication, and potentially even 6 meters or HF frequencies to ensure clear and reliable communication throughout the event.

Challenging yet Rewarding

While shadowing event officials and sweep teams on the trails may require physical exertion, this event also offers opportunities to work from a comfortable rest stop and enjoy camaraderie. Importantly, this real-world scenario provides a valuable training ground for honing our communication skills in a demanding environment, similar to what we might encounter during a disaster situation.

Communication Network Breakdown

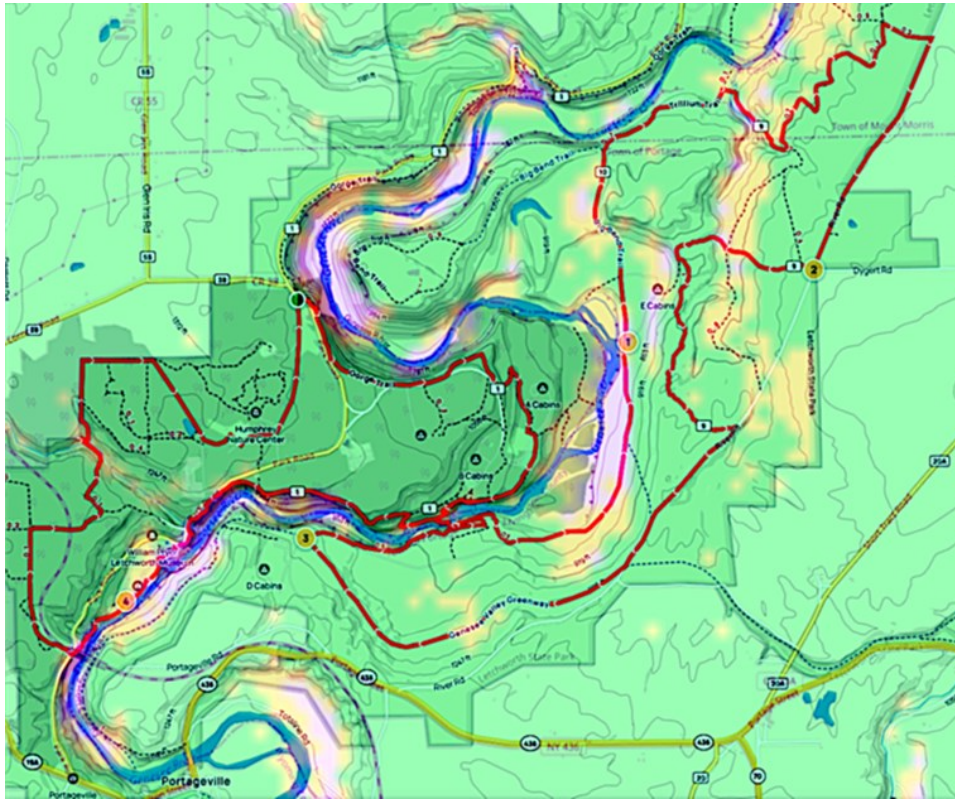
To ensure seamless communication throughout the hike, we will be deploying radios at the following key locations:

- Command Center (HQ): Main communication hub for coordinating all activities.
- Start/Finish Line: Facilitating communication between participants and event staff.
- 4 Aid/Water Stations: Strategically placed for participant support and reporting needs.
- Sweep Crew: Maintain contact with the last hikers on the trail and report any issues.
- Shuttle (Low Priority): Providing backup communication for the shuttle service.

Shift Schedule

The event will run from 7:00 AM to 7:00 PM. We can create two operational shifts to ensure adequate coverage throughout the day.

Interested RARA members are encouraged to sign up for this rewarding opportunity at https://www.rochesterham.org/public_service.htm or contact Jon Dickason, N2JAC



Mammoth March Route - Letchworth Park

The Fairport Lift Bridge Regatta, which was planned for September 20th, will not be held this year. The Fairport Canoe Club plans to restart the event in 2025.

The Wilmot Breakaway Ride & Wilmot Warrior Walk + 5K will be held Sunday, September 22, at the Xerox Campus, Webster, NY. RARA will provide route communications for rides of 75, 50, 25, and 12 miles. We expect that the communications command center will be set up in Bldg. 139 at the Xerox campus. The routes are under development but will be similar to those used for the Tour de Cure in years past.

2024 RARA JULY LIST OF PUBLIC SERVICE EVENTS

Event	Location	Day	Date
MS Roc the Ride Great Lakes Adventure	Lakeside Beach State Park	Saturday	August 10, 2024
Mammoth March Upstate NY	Letchworth Park	Saturday	August 10, 2024
ILLW	Charlotte-Genesee Lighthouse	Saturday and Sunday	August 17-18, 2024
Wilmot Breakaway Ride	Xerox Campus - Webster, NY	Sunday	Sept 22, 2024
JOTA / Ham Radio Demonstration - CTC	Camp Cutler, Na- ples, NY	Saturday	Oct. 19, 2024
Pumpkin Patrol	Overpasses of the New York State Thruway	Wednesday and Thursday	Oct. 30-31, 2024

RARA CALENDAR

TIM BARRETT, K9VB, MEMBERSHIP SECRETARY

August 2024						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NRAU 10m Activity Contest NCCC FT4 Sprint SKCC Sprint (Europe) Weekly RTTY Test QRP Foxhun	2 K1USN Speed Test	3 ROC City Net 28.405 MHz, 9pm TCARA Hamfest, Trumansburg Batavia FT8 Contest (Indonesia) 10-10 Summer Contest, SSB ARRL 222 MHz and Up NA QSO Party CW European HF Championship
4 Batavia FT8 Contest (Indonesia) 10-10 Summer Contest, SSB ARRL 222 MHz and Up NA QSO Party CW European HF Championship SARL HF Phone Contest K1USN Speed Test	5 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest ARS Spartan Sprint	6 JS8 Group 14.078 MHz, 9pm Phone Weekly Test	7 RARA Monthly Mtg BSA & ONLINE 7pm ROC City Net ~3.830 MHz, 7p A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80	8 RARA BoD Mtg 6:30pm ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC FT4 Sprint QRP Foxhunt Weekly RTTY Test NCCC Sprint	9 K1USN Speed Test	10 ROC City Net 28.405 MHz, 9pm Mammoth March Letchworth Pk MSROC Great Lakes Event WAE DX Contest, CW SARL Youth QSO Party Kentucky State POTA Maryland-DC QSO Party SKCC Weekend Sprintathon YB Bekasi Merdeka Contest 50 MHz Fall Sprint
11 ARRL EME Contest WAE DX Contest, CW SARL Youth QSO Party Kentucky State POTA Maryland-DC QSO Party SKCC Weekend Sprintathon YB Bekasi Merdeka Contest 50 MHz Fall Sprint SARL HF Digital Contest	12 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest	13 JS8 Group 14.078 MHz, 9pm DARC FT4 Contest Phone Weekly Test NAQCC CW Sprint	14 ROC City Net ~3.830 MHz, 7p A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80 Walk for the Bacon Contest	15 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NTC QSO Party NCCC Sprint NCCC FT4 Sprint Weekly RTTY Test QRP Foxhunt	16 K1USN Speed Test	17 ROC City Net 28.405 MHz, 9pm KLARA Hamfest, Avoca ILLW at Charlotte Lighthouse SARTG WW RTTY Contest ARRL 10GHz and Up Contest Keymans Club of Japan Contest Feld Hell Sprint NA QSO Party SSB CVA DX Contest, CW
18 ILLW at Charlotte Lighthouse SARTG WW RTTY Contest ARRL 10GHz and Up Contest Keymans Club of Japan Contest NA QSO Party SSB CVA DX Contest, CW NJQRP Skeeter Hunt ARRL Rookie Roundup RTTY	19 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest	20 JS8 Group 14.078 MHz, 9pm Phone Weekly Test	21 ROC City Net ~3.830 MHz, 7p A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80	22 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC Sprint NCCC FT4 Sprint Weekly RTTY Test QRP Foxhunt	23 K1USN Speed Test	24 ROC City Net 28.405 MHz, 9pm ROC City Hamfest, Macedon ARRL EME Contest HI OH KS, US Island QSO Pties ALARA Contest WW Digi DX Contest YO DX HF Contest CVA DX Contest, SSB
25 ARRL EME Contest HI OH KS, US Island QSO Pties ALARA Contest WW Digi DX Contest YO DX HF Contest CVA DX Contest, SSB SARL HF CW Contest	26 AWA Net 145.110 MHz, 7pm VHF Group 9pm 144.260 SSB ICWC Medium Speed Test OK1WC Memorial WW Sideband Activity Contest QCX Challenge	27 JS8 Group 14.078 MHz, 9pm Phone Weekly Test SKCC Sprint	28 ROC City Net ~3.830 MHz, 7p A1 Club AWT CWOps Test VHF/UHF FT8 Activity Contest Mini Test 40, 80	29 ARES Net 146.610 MHz, 7pm VHF Group 9pm 50.205 USB NCCC Sprint NCCC FT4 Sprint Weekly RTTY Test QRP Foxhunt	30 K1USN Speed Test	31 ROC City Net 28.405 MHz, 9pm UK / EI DX Contest, CW Colorado QSO Party

VE TEAM

Testing takes place on the 3rd Saturday September - April

Testing will resume on September 21

Testing Location

RIT
Rochester Institute of Technology
Building 16 -Schmitt Interfaith Center
43.08402626755475, -77.6734520379509

- Easiest path is from Parking Lot D it can be accessed from West Jefferson Rd via Andrews Memorial Dr or Lowenthal Rd
- From parking lot D walk south up the ramp to the Schmitt Interfaith Center.
- Once inside there is an elevator over to your left or stairs in front of you. Go to the first floor and you will find the Skalny room.

Please Note: this room cannot be accessed from the door under the bridge.

Pre-registration is required visit:

<https://hamstudy.org/sessions/14612/inperson> to find the latest session.

More information is available on the RARA website:

https://rochesterham.org/license_testing.htm

Applicants must supply their own pen, pencil, calculator

Testing begins at 10:00AM.

Also Note: The exam is free however the FCC now charges \$35 for applications. This fee is NOT paid to the VE team. It is paid directly to the FCC. You will receive an email from the FCC when your application is processed. We will also have an information sheet available

NEWS FROM AREA CLUBS

MONROE COUNTY ARES / RACES NEWS

Monroe County Amateur Radio Emergency Service (ARES)® is an amateur radio public service organization based in Monroe County, New York, and is open to all licensed amateur radio operators. Monroe County Radio Amateur Civil Emergency Service (RACES) is a program of the Monroe County Office of Emergency Management. We participate in training and emergency exercises so that we can serve other agencies during times of communication failure.



The Monroe County Amateur Radio Emergency Service, Inc. holds its meetings on the fourth Thursday of each month except in July, August, November and December. The meeting in November is on the third Thursday to avoid interfering with Thanksgiving. Anyone interested, members and non-members, are welcome to attend. The meetings are in person at 6:00 PM at the county EOC in even months and at the Red Cross in odd months. They are also available via Zoom. Please check our website for any schedule changes. Prospective members can request an invitation by email to: secretary@monroecountyemcomm.org.

Monroe County ARES/RACES meets on the air every Thursday of the month at 7:00 PM, on the W2ARM 146.61 MHz (-) 110.9 Hz PL and 444.45 MHz (+) 110.9 Hz PL repeaters. Our club callsign is WB2EOC. On nights when we hold our regular meeting, the net is at 5:30 PM.

Web: www.monroecountyemcomm.org

Facebook: Monroe County Amateur Radio Emergency Service, Inc.

Twitter @MCARESNY

ROCHESTER DX ASSOCIATION, RDXA



NEXT MEETING: TUESDAY 18 JUNE, 7:00PM

LOCATION: JOHNNY'S, 1382 CULVER RD

PROGRAM—N2RD (RAJ) MULTIBAND RECEIVE ANTENNA ARRAY OF VERTICALS WITH NO RADIALS

Go to RDXA.COM for additional information

XRX AMATEUR RADIO CLUB

The XRX Amateur Radio Club meets the second Thursday of the month (except July and August). 7PM at the Webster Recreation Center. Zoom meeting info, when available, is sent out to our mailing list. How to subscribe and up-to-date information is always on our website at <http://xarc.us> We have a System Fusion repeater south of the city on 145.290, and another on 444.825 west of the city that is also D-Star capable. Both are also analog capable with 110.9Hz tone. All are welcome.

AMATEUR RADIO ASSOCIATION OF THE SOUTHERN TIER, ARAST

ARAST meets the third Thursday of every month at the Emergency Communications Center on Harris Hill in Big Flats, next to the National Soaring Museum. Our Chemung County ARES (CCARES) organization meets the first Tuesday of the month at the same location. Both organizations serve amateurs in Chemung County and the surrounding counties in New York and Pennsylvania. All are welcome to attend our meetings, which begin at 7 p.m. All monthly meetings are held both in person and on Zoom.

Don't forget to check out our repeaters when you visit the area. N3AQ 147.36(+) and the W2ZJ 146.70(-) are the principal 2-meter repeaters, both with a PL of 123.0. The latter can also be accessed via Echolink node 574415 with the call sign KD2QND-R. A full list of repeaters in the Twin Tiers area can be found at http://www.arast.info/arast_website/public/repeaters.php.

We also invite you to check out our 6-meter net on Wednesday evenings at 9 p.m. local time on 50.200 MHz USB. We welcome participation from RaRa members.

Tickets for our upcoming hamfest on September 28, 2004 can now be obtained online at http://www.arast.info/arast_website/public/hamfest.php) or from ARAST members for \$6.00.

COMMUNITY AMATEUR RADIO CLUB, CARC

If you are interested in being a part of this forward thinking and active club, visit us at a meeting or join us on one of our weekly nets. We meet at the Hoag Library (134 S. Main St. Albion, NY) on the first Saturday of each month at 7PM. Each meeting has a brief training/refresher period with upcoming topics including: net protocol, repeater set-up/maintenance, and digital signaling. The club holds a net every Sunday evening at 8pm (winter) and 9PM (summer) - 0100 UTC Monday - on 147.585 simplex, and we host the Thursday Night Social Net, Thursday at 8:30PM on 147.285+. We'd love to hear you check-in!

DRUMLINS AMATEUR RADIO CLUB

The Drumlins Amateur Radio Club meets every third Wednesday of the month at 7:30 PM at the Wayne County EMO/Sheriff's Office 7376 State Hwy 31 #1000, Lyons, NY 14489. Doors open at 7 pm, meeting starts at 7:30 pm. Announcements will be made on the 146.685 repeater. The Drumlins ARC website address is <http://drumlinsarc.us/>

DIGITAL COMMUNICATIONS ASSOCIATION OF PERINTON, DCAP

DCAP members continue to experiment with leading edge digital communication modes. We were formed in 1994 to foster the development of local and regional packet radio networks using AX25 and TCP/IP. Today we have members using the club sponsored DSTAR repeater (KB2VZS on 444.8MHz), several personal and publicly accessible DSTAR hotspots, Yaesu System Fusion systems on non-club repeaters and DMR systems through repeaters and personal hotspots. DCAP members meet for breakfast at 7AM nearly every Saturday morning at Riki's Family Restaurant in the village of Fairport and everyone is welcome to join us. Talk in is on the KB2VZS analog repeater on 146.715MHz with a PL tone of 110.9Hz.

KEUKA LAKE AMATEUR RADIO ASSOCIATION, KLARA

The Keuka Lake Amateur Radio Association Hamfest is August 17th, "Friendliest little Hamfest around." See flyer on page 20.

Door Prizes

- Certificate for N3FJP's Amateur Radio Software
- Certificates from Alpha Antenna (\$50)
- Certificates from ARRL
- Ham Radio Theme T-shirts
- ARRL Shopping Bags

Grand Prize: NanoVNA handheld Vector Network Analyzer (VNA)

Our meetings are always the 2nd Wednesday. Dish to pass meal at 6pm with meeting at 7pm. All are welcome.

Don't forget our daily Monday thru Friday 75 meter HF net. Check in at 7:45am starts 8:00 am on 3.896. Always a great way to start your day.

73,
Belinda KD2BPJ

ORLEANS COUNTY AMATEUR RADIO CLUB

The Orleans County ARC meets every 2nd Monday of the month at the Orleans County Emergency Operations Center, 14064 West County House Road, Albion, NY 14411. Doors open at 6:00PM, meeting starts at 7:30PM. Anyone with an interest in amateur radio is welcome. Program topics vary from month to month.

The club has an open two-meter net every Tuesday night at 9:00PM local time on the club repeater, WA2DQL/R (145.27 -600KHz offset, 141.3 tone). Everyone is welcome to check in.

See the club website <http://ocarc.us> or contact club Secretary Ron Craig, N5BNO for more information.

ROCHESTER VHF GROUP

You are invited to
join us on-line &
on-the-air! We're
here to help you to
use the license that
you worked so hard to get.



Check out what we do by visiting our
website at <http://RVHFG.org> to start.

Join our e-mail group by sending a message
to RVHFG+subscribe@groups.io.

Join our weekly on-the-air nets on SSB:
2 meter band - Monday 9 PM 144.260 USB
6 meter band - Thursday 9 PM 50.205 USB

No VHF SSB radio (yet) to join the nets?
Log-in to Echolink [ka2ene-L #23426](#)

We can help to answer the question, "What radio should I buy?" Here's a list of HF+++ radios, those with the HF bands and at least three VHF bands, giving you access to all sorts of VHF fun. Research each one to see which serves you best. Ask questions on our email list. We're here to help!

Yaesu FT-100D	Yaesu FT-817	Yaesu FT-818
Yaesu FT-847	Yaesu FT-857	Yaesu FT-897
Icom IC-706MKIIG	Icom IC-7000	Icom IC-7100
Icom IC-9100	Kenwood TS-2000	

Some are older models and some are newer models, but all provide access to the 6 meter, 2 meter, and 70 centimeter bands using both traditional FM and the exciting narrow-band SSB mode that supports unexpectedly long-distance (100's of km's routinely and 1,000's of km occasionally) VHF communication. These are good all-around radios no matter what club you end up affiliating with later. We hope its us.

SKENOH ISLAND AMATEUR RADIO CLUB, SIARC

The Skenoh Island Amateur Radio Club and meets every second Wednesday of the month at 7:30PM at the Ontario County Safety Training Facility, 2914 County Road 48, Town of Hopewell. We have License Exam Testing every other month which begins at 6:30PM. There will not be a meeting in August. The next meeting will be on Wednesday, September 11th. There will be election of club officers. There will not be VE testing in September.

SIARC is also holding a Health and Welfare NET Monday through Friday each week at 2000 hours on the SIARC 146.820 repeater (located in Canandaigua, NY), Tone 110.9. This net is to pass along general information and keep hams in touch. All hams are invited to participate.

73's
Steve Benton
WB2VMR

ROCHESTER RADIO REPEATER ASSOCIATION

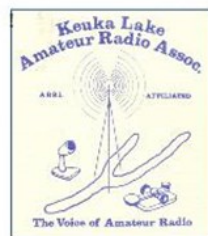
The current club officers are Bob Odell, N2BZX - President, Bob Shewell, N2HJD - Vice President, Jay Stewart, W4JPS - Secretary, and Jerry Powell, KC2YSY - Treasurer / Membership Chairman. RRRA also accepts donations to the club. If you are not currently a member and want to support RRRA, you can join at our monthly meeting or on our web site using PayPal. www.k2rra.org

THE AMATEUR'S CODE

Originally written by Paul M. Segal, W9EEA (1928)

THE RADIO AMATEUR IS:

CONSIDERATE	Never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL	Offering loyalty, encouragement and support to other amateurs, local club, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE	With knowledge abreast of science, a well built and efficient station and operation beyond reproach.
FRIENDLY	With slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED	Radio is an avocation, never interfering with duties owed to family, job, school or community.
PATRIOTIC	With station and skill always ready for service to country and community.



16th Annual
Keuka Lake Amateur Radio Association

HAMFEST

Saturday, August 17, 2024 Howard, NY

Just off I-86 at Exit 35



follow signs to the Howard Community Center

Special instructions for GPS users:

Some GPS systems will recognize 7481 Hopkins Rd., Howard, NY.
Since Howard, NY does not have a post office or ZIP Code,
some GPS systems will require 7481 Hopkins Rd., Avoca, NY 14809.
Or use coordinates 42.3618,-77.510.

Talk-In
on the KLARA
Repeater System

145.190 — Bath, NY
147.045 + Arkport, NY
147.330 + Cameron, NY
PL 110.9

**Admission
and
Breakfast**

\$5.00 admission includes
one outdoor flea market
space or one indoor table
space. Also available is a
full breakfast with eggs and
pancakes.
Never ending coffee!



Friday Night Camping

Join us for free on-site overnight camping.
Self contained camping units only.
No electric. No water.
Yes, an enjoyable evening with very friendly hams.

Campers Must RSVP
keukalakeara@gmail.com



KLARA/ARRL Testing

10:00am - a perfect time
to get your Ham Radio License
or upgrade to General or Extra

Visit us on Facebook:
Keuka Lake Amateur Radio Association
Visit us on the web:
klara.us
Contact us at:
keukalakeara@gmail.com

Hamfest Schedule

7:00 Vendor Admission
7:30 Open to the Public
8:00 Breakfast Begins
8:30 1st Door Prize Drawing
9:00 2nd Door Prize Drawing
9:30 3rd Door Prize Drawing
10:00 4th Door Prize Drawing
10:00 VE Testing
10:30 5th Door Prize Drawing
11:00 50-50 Drawing and
More Door Prizes

Must be present to win



AWA Educational Institute

2024 Hands-On Classes

Learn It, Build It, Fix It

Vacuum Tube Radio101 Boot Camp **Sunday-Tuesday 9/29-10/1**

Solid State Audio Theory **3 Saturdays Starting 10/12**

Test Equipment Familiarization **Saturday 11/9**

To get more information visit: www.antiquewireless.org/homepage/learn-build-fix-classes/

AWA SHARES

MICHAEL C. MIGLIACCIO, N3HLM, VICE PRESIDENT, AWA

The monthly *AWA Shares* is about to stage its thirtieth presenter. Thanks to the video on-line streaming of Zoom becoming so popular in the past few years, people are now able to learn more about the historical and technical universe of communications. Presented topics have ranged from accounts of the bygone era of electrically assisted communications to the specific technology details of practical designs. Every third Wednesday of the month Zoom presentations bring you the adventures of early communications pioneers into the privacy and convenience of your home. Audio kits, locating power line noise, NASA communications, early amateur radio pursuits, telegraphy, broadcast history and many other topics delivered to you, in the comfort of your special space where you can sit in your comfy clothes, sip a favorite beverage, enjoying your favorite snack. I encourage you to go to the AWA website and register for the free monthly *AWA Shares* presentations.

Link: <https://www.antiquewireless.org/homepage/awa-shares/>

RARA OFFICERS, DIRECTORS AND COORDINATORS

OFFICERS

President: Scott Theis, W2LW	(845) 774-9809	president@rochesterham.org	Treasurer: Brian O'Connor, KA2CGB	(585) 721-2346	treasurer@rochesterham.org
Vice-President: Tim Barrett, K9VB	(646)496-5015	vicepresident@rochesterham.org	Secretary: Mike Moore, KC2NM	(585) 721-0011	secretary@rochesterham.org

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Mike Kennerknecht, N2MAK	(585) 754-2444	makennerknecht@gmail.com			

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Club Historian	Ed Gable, K2MP	egable@rochester.rr.com	Online Meetings	Scott Theis, W2LW	sa_theis@hotmail.com
Club Station Trustee	Dave Enright, K3WHD	denright1228@gmail.com	Public Service	Mike Moore, KC2NM	publicservice@rochesterham.org
Education Coordinator	Karl Heinz Kremer, K5KHK	education@rochesterham.org	QSL MANAGER	Dave Enright, K3WHD	denright1228@gmail.com
Elmers' Corner	Richard Bishopp, KD2UBJ Suzanne Bishopp, W2SUZ	elmerscorner@rochesterham.org	Raffle Administrators	Forest Shick, WA2MZG Jeff Sonstein, WA2RRB	wa2mzg@arrl.net
Groups.io Moderators	Tim Barrett, K9VB Karl Heinz Kremer, K5KHK	tim.k9vb@gmail.com k5khk@khk.net	RARA Academy	Volunteer Needed	academy@rochesterham.org
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ROCHESTER AREA RADIO CLUB CONTACTS

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Antique Wireless Association (AWA)

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Astronomy Section Rochester Academy of Science

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Digital Communications Association of Perinton (DCAP)

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drumlinsarc@gmail.com

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West Side Amateur Radio Club

XRX Amateur Radio Club

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Rochester Makerspace

David Duckles: rocmakers@gmail.com

SEPTEMBER RAG DEADLINE
AUGUST 15, 2024

RARA MEETS AT 7PM ON THE FIRST
WEDNESDAY OF EACH MONTH.

JOIN US IN PERSON
OR
ONLINE AT:

<https://attendee.gotowebinar.com/register/5293521103168925269>

CONTACT WEBMASTER@ROCHESTERHAM.ORG FOR SUPPORT

Rochester Area Repeater Listing
THE RARA RAG

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Website – <http://www.rochesterham.org>